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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,363	04/11/2001	Samuel Bendinelli	7937.0002-02	9396

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EXAMINER

AKPATI, ODAICHE T

ART UNIT PAPER NUMBER

2135

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/832,363	Applicant(s) BENDINELLI ET AL.	
	Examiner Tracey Akpati	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB-08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/13/01, 11/6/01, 3/13/02</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. All related patent applications to this case quoted on page 1 and 2 of the specification have been reviewed by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crichton et al (6104716).

With respect to Claim 1, the limitation of “a method for enabling communication between a first processor and a second processor using at least one additional processor separate from the first processor and the second processor, wherein one or more firewalls selectively restrict the communication” is met in Fig. 4; and “determining, at the least one additional processor, whether the first and second processors mutually consent to enabling a hairpin between the first and second processors” is met on column 5, lines 9-13, 45-60; and “providing to the first processor a first information identifying the hairpin and to the second processor a second information identifying the hairpin, when the at least one additional processor determines that the first and second processors mutually consent to the hairpin; and establishing a first information flow from the first processor to the hairpin based on the provided first information; establishing a second information flow from the second processor to the hairpin based on the

provided second information; and forwarding, at the hairpin, the first information flow received from the first processor to the second processor such that the communication between the first and second processors is allowed by the one or more firewalls” is met on column 5, lines 45-67, column 6, lines 1-6 and in Fig. 4. The first processor is represented by the client end proxy. The second processor is represented by the server end proxy and the additional processor is represented by the middle proxy.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the middle proxy enable a hairpin between the two proxy servers because it acts as a proxy between the first and second processors/servers and aids in the exchange of data across one or more firewalls.

With respect to Claim 2, the limitation of “providing an IP address and a first port number at the hairpin” is met inherently on column 5, lines 6-8. This is because the IP address and port number qualify as set up information.

With respect to Claim 3, the limitation of “establishing a first flow of packets from the first processor to a first port at the hairpin based on the provided first information” is met on column 5, lines 9-13.

With respect to Claim 4, the limitation of “defining the first port as a TCP port at the hairpin” is met on column 4, lines 60-62.

With respect to Claim 5, the limitation of “establishing a second flow of packets from the second processor to a second port at the hairpin based on the provided second information” is met on column 5, lines 54-60.

With respect to Claim 6, the limitation of “forwarding the second information flow from second processor to the first processor such that the communication between the first and second processors is allowed by the one or more firewalls” is met on column 5, lines 54-63 and in Fig. 4.

With respect to Claim 7, the limitation of “receiving, at the at least one additional processor, a first request from the first processor for a hairpin” is met on column 5, lines 49-51; and “receiving, at the at least one additional processor, a second request from the second processor for the hairpin” is met on column 5, lines 54-57; and “authorizing, at the at least one additional processor, a first port at the hairpin and a second port at the hairpin, when each of the first and second processors consents to enabling the hairpin; and allocating the first port for the first processor and the second port for the second processor” is met on column 5, lines 57-67 and on column 6, lines 1-6; and “forwarding, at the hairpin, one or more packets received at the first port from the first processor to the second port such that the communication between the first and second processors is allowed by one or more firewalls” is met on column 5, lines 61-65. The first processor is represented by the client end proxy. The second processor is represented by the server end proxy and the additional processor is represented by the middle proxy.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the middle proxy enable a hairpin between the two proxy servers because it acts as a proxy between the first and second processors/servers and aids in the exchange of data across one or more firewalls.

With respect to Claim 8, the limitation of “forwarding the one or more packets received at the first port without decoding one or more payloads included within the one or more packets” is met on column 5, lines 61-65. This is because the middle proxy does not decode any further information received.

With respect to Claim 9, the limitation of “authorizing, at the at least one additional processor, the first processor to serve as the hairpin” is met on column 2, lines 26-27, 32-35.

With respect to Claim 10, the limitation of “authorizing the at least one additional processor to serve as the hairpin” is met on column 2, lines 26-27, 32-35.

With respect to Claim 11, the limitation of “authorizing, at the at least one additional processor, a processor to serve as the hairpin, wherein the processor is separate from the first and second processors and the at least one additional processor” is met on column 4, lines 42-50.

With respect to Claim 12, the limitation of “connecting from the first processor to the first port and from the second processor to the second port” is met on column 4, lines 42-50.

With respect to Claim 13, the limitation of “connecting from the first processor to the first port and from the second processor to the second port using a transmission control protocol” is met on column 4, lines 42-50 and on column 4, lines 58-60.

With respect to Claim 14, the limitation of “defining each of the first and second ports using a transmission protocol” is met on column 4, lines 58-60.

With respect to Claim 15, the limitation of “defining the transmission protocol as a User Datagram Protocol (UDP)” is obvious over column 4, lines 58-60. This is because UDP is the connectionless alternate to a TCP connection. Hence it would be obvious to use a UDP connection in place of a TCP connection to achieve a faster transmission of the data packets.

With respect to Claim 16, the limitation of “determining that the one or more firewalls selectively restrict communication between the first and second processors” is met on Fig. 4.

With respect to Claim 17, the limitation of “determining, at the at least one additional processor, that the one or more firewalls selectively restrict communication between the first and second processors based on information provided by the first and second processors” is met on column 4, lines 42-50.

With respect to Claim 18, the limitation of “determining, at the at least one additional processor, that the one or more firewalls selectively restrict communication between the first and second processors based on information determined by the at least one additional processor” is met on column 4, lines 42-50.

With respect to Claim 19, the limitation of “forwarding, at the hairpin, one or more packets received at the first port from the first processor to the second port” is met on column 5, lines 9-13.

With respect to Claims 20-23, their limitation is similar to Claim 1 limitation and hence their rejection can be found therein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracey Akpati whose telephone number is 703-305-7820. The examiner can normally be reached on 8.30am-6.00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please note the Patent Office will be moving to the Alexandria campus in October. The new phone number for myself, Tracey Akpati is (571) 272-3846, my SPE, Kim Vu is (571) 272-3859 and the receptionist is (571) 272-2100.

OTA



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